

Product Texts

LNP THERMOCOMP AF004AHP compound is based on Acrylonitrile Butadiene Styrene (ABS) resin containing 20% glass fiber. Added features of this grade include: Healthcare.

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Mold Shrinkage, MD	0.3	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.55	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	5950	MPa	ISO 527
Stress at break	66	MPa	ISO 527
Strain at break	1.6	%	ISO 527
Flexural modulus	5520	MPa	ISO 178
Flexural strength	98	MPa	ISO 178
Izod impact strength, +23°C, 4mm	17	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	5	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	6240	MPa	ASTM D 638
Tensile Strength at Break	69	MPa	ASTM D 638
Elongation at Break	1.7	%	ASTM D 638
Flexural Modulus	5860	MPa	ASTM D 790
Izod Impact notched, 1/8 in	58	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	263	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	99	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	104	°C	ISO 75-1/-2
ASTM Data			
Coefficient of Thermal Expansion, MD	41.9	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	86	E-6/K	ASTM D 696
DTUL @ 66 psi	103	°C	ASTM D 648
DTUL @ 264 psi	99	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Humidity absorption	0.26	%	Sim. to ISO 62
Water Absorption, 24hr	0.16	%	ASTM D 570
Density	1230	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	4	h	-
Processing humidity	≤0.1	%	-
Melt temperature	260	°C	-
Mold temperature	70 - 80	°C	-
Zone 1	205 - 215	°C	-
Zone 2	230 - 245	°C	-
Zone 3	265 - 275	°C	-
Screw speed	30 - 60	rpm	-
Back pressure	0.2 - 0.3	MPa	-

Characteristics**Processing**

Injection Molding

Regional Availability

North America, Europe, Asia Pacific